

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Cancelled) A card for a personal computer, comprising:

- (a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer; and
- (b) radio frequency modulation circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto,

wherein the card is coupled to an external antenna system, and comprises a connector, through which a DC source external to the card powers the antenna system.

Claim 2. (Amended) A card according to claim 24, wherein the radio frequency modulation circuitry comprises a frequency synthesizer generating the radio frequency signals.

Claim 3. (Original) A card according to claim 2, wherein the frequency generated by the frequency synthesizer is set by a controller on the circuit board.

Claim 4. (Original) A card according to claim 2, wherein the frequency generated by the frequency synthesizer is set by conveying instructions via the computer bus.

Claim 5. (Cancelled) A card according to claim 1, wherein the card is coupled to an external antenna system, and comprises a connector, through which a DC source external to the card powers the antenna system.

Claim 6. (Cancelled) A card for a personal computer, comprising:

- (a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer; and

(b) radio frequency modulation circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto,

wherein the modulation circuitry is coupled to convey the radio frequency signals to the antenna system via the connector.

Claim 7. (Amended) A card according to claim 24, wherein the modulation circuitry modulates the transmitted signals according to a predefined protocol in accordance with a command conveyed to the card via the industry-standard bus.

Claim 8. (Amended) A card according to claim 24, wherein the modulation circuitry comprises an encoder which encoded error correction into the transmitted signals according to a predefined protocol in accordance with a command conveyed to the card via the industry-standard bus.

Claim 9. (Amended) A card according to claim 24, and comprising an auxiliary connector through which the card is connected to at least one other card located within the computer, such that signals pass between the cards without passing through the industry-standard bus.

Claim 10. (Cancelled) A card for a personal computer, comprising:

(a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer; and

(b) radio frequency modulation circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto,

wherein said radio frequency signals are transmitted to a satellite.

Claim 11. (Cancelled) A radio frequency (RF) communication card for a personal computer, comprising:

- (a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer;
- (b) RF circuitry on the circuit board, which receives the data and processes RF signals responsive thereto;
- (c) an auxiliary connector data via an industry-standard bus in the personal computer; through which the card is connected to at least one other card located in the computer, such that the signals pass between the cards without passing through the industry-standard bus; and
- (d) an antenna connected said circuit board, wherein said antenna transmits RF signals received from said circuit board.

Claim 12. (Cancelled) A card according to claim 24, wherein the card conveys a synchronizing signal via the auxiliary connector.

Claim 13. (Cancelled) A satellite transceiver for a personal computer, comprising:

- (a) a transmitter card which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer and which transmits radio frequency signal responsive to the received data;
- (b) a receiver card which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus and which receives radio frequency signals and converts the received signals to data for transfer via the bus;
- (c) an auxiliary bus connecting the transmitter card to the receiver card; and
- (d) an antenna connected said transmitter card, wherein said antenna transmits RF signals received from said circuit board.

Claim 14. (Cancelled) A transceiver according to claim 13, wherein the transmitter card and the receiver card comprise respective connectors coupling the cards to the auxiliary bus.

Claim 15. (Cancelled) A method for transmitting a radio frequency signal directly from a personal computer, comprising:

- (a) mounting the transmitter card in the personal computer
- (b) conveying data to the card via an industry standard bus in the personal computer; and
- (c) transmitting the radio frequency signals from the card to an antenna responsive to the data,

wherein transmitting the signals comprises transmitting the signals to a satellite.

Claim 16. (Cancelled) A method according to claim 15, wherein conveying data to the card comprises determining a frequency band of said radio frequency signal.

Claim 17. (Cancelled) A method according to claim 15, and comprising mounting a power connector on the card; and powering an antenna system external to the card via power connector.

Claim 18. (Cancelled) A method according to claim 15, wherein transmitting the radio frequency signals comprises modulating the signal in accordance with a modulation scheme determined responsive to a command conveyed via said bus.

Claim 19. (Cancelled) A method according to claim 15, wherein transmitting the radio frequency signals comprises encoding an error correction onto the signal in accordance with an encoding scheme determined responsive to a command conveyed via said bus.

Claim 20. (Cancelled) A method according to claim 15, and comprising connecting the transmitter card to at least one other card via an auxiliary connector, such that signal pass between the cards without passing through the industry-standard bus.

Claim 21. (Cancelled) A method according to claim 15, wherein transmitting the signal comprises transmitting the signal to a satellite.

Claim 22. (Cancelled) A method for transmitting and receiving signals between a satellite and a personal computer, comprising:

- (a) coupling a transmitter card to an industry-standard bus in the personal computer;
- (b) transmitting radio frequency signals from the transmitter card to an antenna responsive to the data from the bus
- (c) coupling a receiver card to the industry-standard bus;
- (d) receiving radio frequency signals in the receiver card responsive to data from the bus; and
- (e) coupling the transmitter and receiver cards together directly via an auxiliary bus separate from the industry-standard bus.

Claim 23. (Cancelled) A method according to claim 22, wherein receiving radio frequency signals comprises conveying a synchronizing signal from the receiver card to the transmitter card via the auxiliary bus.

Claim 24. (New) A card for communicating to and from a personal computer through a very small aperture terminal (VSAT), comprising:

- (a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer; and
 - (b) radio frequency modulation circuitry on the circuit board, which receives the data and transmits radio frequency signals responsive thereto,
 - (c) a connector, through which a DC source external to the card powers the VSAT,
- wherein the card is connected to said VSAT, said VSAT comprising an upconverter and a power amplifier for transmitting data to an earth-orbiting satellite from said card.

Claim 25. (New) A transceiver for communicating to and from a personal computer through a very small aperture terminal (VSAT), comprising:

(a) a transmitter card which plugs into said personal computer and which is coupled to exchange data via an industry-standard bus in said personal computer, said transmitter card transmitting data from said personal computer to an earth-orbiting satellite via said VSAT;

(b) a receiver card which plugs into said personal computer and is coupled to exchange data via said industry-standard bus, said receiver card receiving signals from said VSAT and converting the received signals to data for transfer via said industry-standard bus; and

(c) an auxiliary bus connecting the transmitter card to the receiver card,

wherein said VSAT comprises an upconverter and a power amplifier and transmits RF signals received from said circuit board.

Claim 26. (New) A card for communicating to and from a personal computer through a very small aperture terminal (VSAT), comprising:

(a) a circuit board which plugs into the personal computer and which is coupled to exchange data via an industry-standard bus in the personal computer; and

(b) radio frequency modulation circuitry on the circuit board, which receives the data from an earth-orbiting satellite received by said VSAT and transmits radio frequency signals to said an earth-orbiting satellite via an upconverter and power amplifier in said VSAT.

Claim 27. (New) A card according to claim 26, wherein the radio frequency modulation circuitry comprises a frequency synthesizer generating the radio frequency signals.

Claim 28. (New) A card according to claim 27, wherein the frequency generated by the frequency synthesizer is set by a controller on the circuit board.

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Claim 29. (New) A card according to claim 27, wherein the frequency generated by the frequency synthesizer is set by conveying instructions via the industry-standard bus.